

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method ~~of communications for requesting information~~ for an interactive program guide (IPG), ~~wherein the IPG is provided via a plurality of IPG pages and each IPG page includes a plurality of defined regions, the method~~ comprising:

receiving, by a session manager from a terminal, a demand-cast request message for a particular region of a particular interactive program guide (IPG) page, the particular region being one of a plurality of regions, the regions including a guide region, a video region, an icon region, and a program description region, the particular IPG page being one of a plurality of IPG pages;

receiving at a terminal a selection for a particular region of a particular IPG page;

sending, by the terminal to the session manager, a stream acquired message,

when it is determined determining, at the terminal that the particular whether the selected region is currently received at the terminal; and

sending, by the session manager to a transport stream generator, a stream requested message, when the particular region is not currently received at the terminal;

sending, by the session manager, to the transport stream generator, a stream acquired message, when the particular region is currently received at the terminal;

generating, by a transport stream generator, a stream for the particular region, upon receiving the stream requested message from the session manager;

if the selected region is not currently received at the terminal,

generating a request for the selected region, and

sending the request from the terminal to a server of an information distribution system.

2-3. (Cancelled)

4. (Currently amended) The method of claim 13, wherein demand-cast request message ~~the message format~~ includes a plurality of fields and has a hierarchical

PATENT

Atty. Dkt. No. SEDN/307

Serial No. 09/708,809

Page 3 of 11

structure, ~~the fields including and wherein~~ a first field that determines a particular format of remaining fields in the message format.

5. (Currently amended) The method of claim 1, wherein the demand-cast request message includes a first field identifying the particular region in the particular IPG page~~indicative of the selected region which is chosen from among the plurality of defined regions in the IPG page.~~

6. (Currently amended) The method of claim 5, wherein the particular selected region is ~~the~~ a guide region for a program listing, ~~and wherein the request further includes and the demand-cast request message includes~~ a second field identifying~~indicative of a particular filter selected from among a plurality of filters used to filter programs to be included in the program listing.~~

7. (Original) The method of claim 6, wherein the plurality of filters include one or more filters selected from the group consisting of pay per view (PPV), favorites, movies, kids, and sports filters.

8. (Currently amended) The method of claim 6, wherein the demand-cast request message further includes a third field identifying the particular~~indicative of the selected IPG page, which is chosen from among the plurality of IPG pages.~~

9. (Currently amended) The method of claim 8, wherein the third field includes a fourth field indicative of a particular time slot selected from among a plurality of time slots, wherein the selected time slot corresponds to a time period covered by the particular selected IPG page.

10. (Currently amended) The method of claim 9, wherein the third field further includes a fifth field indicative of ~~the~~ a particular IPG page selected from ~~the~~ among a

~~plurality of IPG pages available for the selected time slot and corresponding to the selected IPG page.~~

11. (Cancelled)

12. (Currently amended) The method of claim 444, wherein the region is the video region and the demand-cast request message further includes a second field indicative of a particular type of video selected from among a plurality of video types.

13-21. (Cancelled)

22. (New) A system for communication for an interactive delivery system, comprising:

a plurality of terminals to receive a plurality of interactive program guide (IPG) pages, to send a plurality of terminal-to-SM messages, the terminal-to-SM messages indicating acquisition, release, or request of one of a plurality of demand-cast streams, and to receive a plurality of TSG-to-terminal messages;

a session manager (SM) to deliver IPG pages to the terminals, to monitor demand-cast stream usage by the terminals, to track the demand-cast streams that are acquired by at least one of the terminals, to send a plurality of SM-to-TSG messages, and to receive the terminal-to-SM messages, and to receive the terminal-to-SM messages and the TSG-to-SM messages; and

a transport stream generator (TSG) to generate the demand-cast streams, to maintain a status for each demand-cast stream being served, to send the TSG-to-terminal messages and TSG-to-SM messages, and to receive the SM-to-TSG messages from the session manager, the SM-to-TSG messages indicating whether there is no longer any terminal registered to a particular demand-cast stream and when there is a demand-cast stream request;

wherein each terminal is coupled to both the session manager and the transport stream generator via a distribution network;

wherein the terminal-to-SM message for requesting one of the demand-cast streams identifies a particular region of a particular IPG page, the particular region being one of a plurality of regions, the regions including a guide region, a video region, an icon region, and a program description region, the particular IPG page being one of the IPG pages.

23. (New) The system of claim 22, further comprising:
a plurality of local neighborhood equipment including the transport stream generator; and
a headend including the session manager.
24. (New) The system of claim 22, further comprising:
a headend including the session manager and the transport stream.
25. (New) The system of claim 22, further comprising:
a plurality of distribution nodes including the session manager and the transport stream generator.
26. (New) The system of claim 22, wherein the TSG-to-terminal messages include a list of available demand-cast streams.
27. (New) The system of claim 22, wherein the SM-to-TSG messages indicate stream released, stream requested, or reset for one of the demand-cast streams.
28. (New) The system of claim 22, wherein the TSG-to-SM messages include an acknowledgement of stream release, stream request, or reset for one of the demand-cast streams.
29. (New) A method for communication for an interactive delivery system, comprising:

partitioning, by a transport stream generator at a headend, a plurality of interactive program guide (IPG) pages into a plurality of regions, the regions including a guide region, a video region, an icon region, and a program description region;
encoding each region using slice-based encoding;
transmitting, from the transport stream generator to a plurality of terminals, each encoded region separately;
recombining the regions at each terminal to assemble each IPG page, some IPG pages being constructed by just replacing at least one region in an existing IPG page;
receiving a demand-cast request message including a region identifier to identify one of the regions of one of the IPG pages; and
transmitting, in response to the demand-cast request message, the requested region.

30. (New) The method of claim 29, wherein the demand-cast request message further includes a subtype field, a time slot field, and a page offset field, the subtype field identifying a filter that is selected from the group consisting of: pay-per-view, favorites, movies, kids, sports, and music, the page offset field identifying a particular IPG page.
32. (New) The method of claim 29, wherein the demand-cast request message is for a particular video for the video region.
33. (New) The method of claim 32, wherein the particular video is an advertisement.